

# PATENT ABSTRACTS OF JAPAN

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(21) Application number : 10-242331 (71) Applicant : KYOCERA CORP

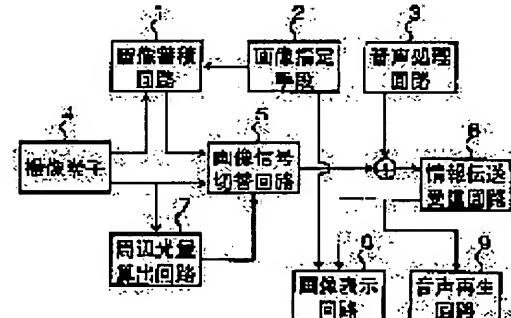
(22) Date of filing : 27.08.1998 (72) Inventor : INOUE HITOSHI

## (54) VIDEO TELEPHONE DEVICE

### (57) Abstract:

**PROBLEM TO BE SOLVED:** To transmit a meaningful image to an opposite side even unless normal photographing can be executed owing to a circumferential darkness by transmitting stored image information in place of image information under photographing when it is judged that the light quantity of a circumferential part is not the one required for photographing.

**SOLUTION:** When the light quantity of the circumferential part calculated by a circumferential light quantity calculating circuit 7, which is the one at the time of photographing by an imaging device 4, is higher than a reference value, image information fetched by the imaging device 4 is selected by an image signal change-over circuit 5. Then, it is transmitted by an information exchanging circuit 6 together with a voice signal from a voice processing circuit 3. When the circumferential light quantity calculated by the circuit 7 is lower than the reference value, previously designated image information in an image storing circuit 1 is selected by the circuit 5. Then, it is transmitted by the information exchanging circuit 6 together with the voice signal from the voice processing circuit 3.



## LEGAL STATUS

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**CLAIMS**

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**[Claim(s)]**

[Claim 1] TV phone equipment characterized by having the control means controlled to transmit the image information accumulated instead of the image information currently photoed when it judges that the quantity of light of the periphery currently photoed with the camera is not brightness required for photography in the TV phone equipment which displays image information which received while transmitting image information photoed with the camera.

[Claim 2] TV phone equipment according to claim 1 characterized by having a transmission means to transmit said accumulated image information as animation information.

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**DETAILED DESCRIPTION**

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**[Detailed Description of the Invention]****[0001]**

**[Field of the Invention]** This invention relates to the TV phone equipment which also transmits and receives speech information while transmitting and displaying between equipment the image information incorporated from the camera.

**[0002]**

**[Description of the Prior Art]** In conventional TV phone equipment, the block diagram of TV phone equipment which is explained by drawing 2 is indicated. For a speech processing circuit and 4, as for an information-transmission receiving circuit and 8, in drawing 2, an image sensor and 6 are [ 3 / an image display circuit and 9 ] voice regenerative circuits. The image information by which it was incorporated with the image sensor 4 at the time of transmission is transmitted to the TV phone equipment of the other party by the information-transmission receiving circuit 6 with the sound signal from the speech processing circuit 3. The image data and voice data with which it was received by the information-transmission receiving circuit 6 at the time of reception are displayed by the image display circuit 8, respectively, and are reproduced by the voice regenerative circuit 9.

**[0003]**

**[Problem(s) to be Solved by the Invention]** If it is in conventional TV phone equipment, when transmitting image information, an image will continue being transmitted no matter the environment of a transmitting side may be in what condition. There is a problem of continuing transmission also under the environment where a photography image with them cannot be transmitted. [ especially the bad lighting conditions of a transmitting side and ] [ normal ] This invention solves these problems, and the purpose is in offering the TV phone equipment which can transmit the image specified beforehand, when the amount of ambient light of a transmitting side is low.

**[0004]**

**[Means for Solving the Problem]** This invention offers the TV phone equipment which has the control means controlled to transmit the image information accumulated instead of the image information currently photoed, when it judges that the quantity of light of the periphery currently photoed with the camera is not brightness required for photography in the TV phone equipment which is for solving these technical problems, and displays image information which received while transmitting image information photoed with the camera.

**[0005]**

**[Embodiment of the Invention]** Hereafter, with reference to a drawing, the gestalt of operation of this invention is explained in detail. Drawing 1 is the block diagram of the TV phone equipment which is one example of this invention. drawing 1 -- setting -- 1 -- an image storage circuit and 2 -- an image assignment means and 3 -- for a picture signal electronic switch and 6, as for the amount calculation circuit of ambient light, and 8, an information-transmission receiving circuit and 7 are [ a speech processing circuit and 4 / an image sensor (camera) and 5 / an image display circuit and 9 ] voice regenerative circuits.

[0006] The image information which computed the quantity of light of the periphery when a photograph is taken by the image sensor (camera) 4 by the amount calculation circuit 7 of ambient light, and was incorporated by the picture signal electronic switch 5 with the image sensor 4 when the computed quantity of light was higher than a reference value is chosen, and it is transmitted to the TV phone equipment of the other party by the information-transmission receiving circuit 6 with the sound signal from the speech processing circuit 3.

[0007] However, the image information as which the quantity of light of the periphery was computed by the amount calculation circuit 7 of ambient light, and it was beforehand specified in the image storage circuit 1 by the picture signal electronic switch 5 when the computed quantity of light was lower than a reference value is chosen, and it is transmitted to the TV phone equipment of the other party by the information-transmission receiving circuit 6 with the sound signal from the speech processing circuit 3.

[0008] The image information in the image storage circuit 1 is read by the image assignment means 2, and a means to specify an image beforehand is displayed by the image display circuit 8. If the image of arbitration is specified out of the displayed image, a selection signal will be stored in an image storage circuit, and image assignment will be performed. The image data and voice data with which it was received by the information-transmission receiving circuit 6 at the time of reception are displayed by the image display circuit 8, respectively, and are reproduced by the voice regenerative circuit 9. Moreover, it can transmit also as animation information by transmitting the image information for every fixed time amount of a certain like animation.

[0009] In addition, although \*\*\*\* described the quantity of light of the periphery which the camera is photoing, it can transmit the image information accumulated instead of the image information currently similarly photoed about the time of the camera currently photoed running by a certain impact to a partner terminal.

[0010]

[Effect of the Invention] As explained above, when the quantity of light of this invention of the periphery when a photograph is taken with the camera is higher than a reference value, the image information currently photoed is transmitted to a partner terminal. Also when photography with it cannot be performed by on the other hand having transmitted the appointed image information to the partner terminal out of are recording image information when lower than a reference value, a meaningful image can be transmitted to the other party. [ it is dark in a perimeter and normal ]

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**TECHNICAL FIELD**

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**[Field of the Invention]** This invention relates to the TV phone equipment which also transmits and receives speech information while transmitting and displaying between equipment the image information incorporated from the camera.

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**PRIOR ART**

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[Description of the Prior Art] In conventional TV phone equipment, the block diagram of TV phone equipment which is explained by drawing 2 is indicated. For a speech processing circuit and 4, as for an information-transmission receiving circuit and 8, in drawing 2, an image sensor and 6 are [ 3 / an image display circuit and 9 ] voice regenerative circuits. The image information by which it was incorporated with the image sensor 4 at the time of transmission is transmitted to the TV phone equipment of the other party by the information-transmission receiving circuit 6 with the sound signal from the speech processing circuit 3. The image data and voice data with which it was received by the information-transmission receiving circuit 6 at the time of reception are displayed by the image display circuit 8, respectively, and are reproduced by the voice regenerative circuit 9.

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**EFFECT OF THE INVENTION**

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[Effect of the Invention] As explained above, when the quantity of light of this invention of the periphery when a photograph is taken with the camera is higher than a reference value, the image information currently photoed is transmitted to a partner terminal. Also when photography with it cannot be performed by on the other hand having transmitted the appointed image information to the partner terminal out of are recording image information when lower than a reference value, a meaningful image can be transmitted to the other party. [ it is dark in a perimeter and normal ]

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**TECHNICAL PROBLEM**

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[Problem(s) to be Solved by the Invention] If it is in conventional TV phone equipment, when transmitting image information, an image will continue being transmitted no matter the environment of a transmitting side may be in what condition. There is a problem of continuing transmission also under the environment where a photography image with them cannot be transmitted. [ especially the bad lighting conditions of a transmitting side and ] [ normal ] This invention solves these problems, and the purpose is in offering the TV phone equipment which can transmit the image specified beforehand, when the amount of ambient light of a transmitting side is low.

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**DESCRIPTION OF DRAWINGS**

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**[Brief Description of the Drawings]**

**[Drawing 1]** It is the block diagram of the TV phone equipment which is one example of this invention.

**[Drawing 2]** It is the block diagram of conventional TV phone equipment.

**[Description of Notations]**

- 1 -- Image storage circuit
- 2 -- Image assignment means
- 3 -- Speech processing means
- 4 -- Image sensor
- 5 -- Picture signal electronic switch
- 6 -- Information-transmission receiving circuit
- 7 -- The amount calculation circuit of ambient light
- 8 -- Image display circuit
- 9 -- Voice regenerative circuit

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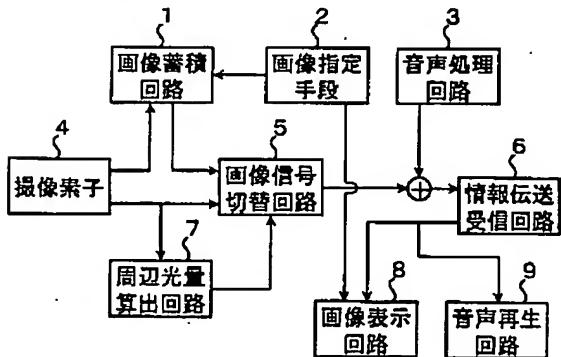
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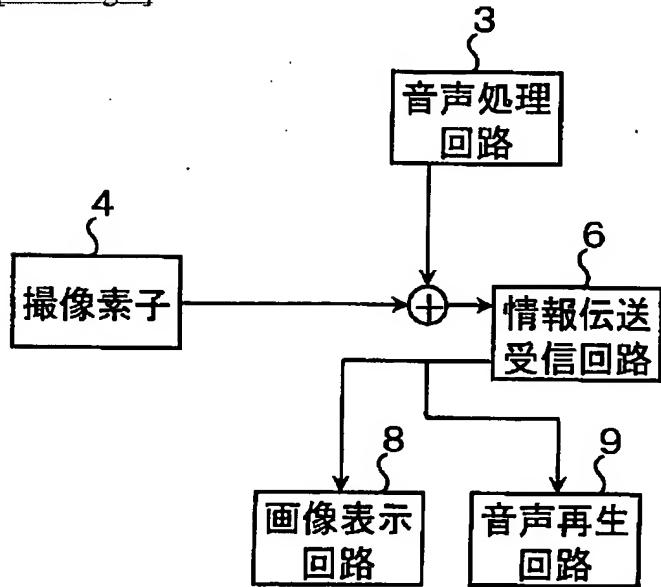
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## DRAWINGS

## [Drawing 1]



## [Drawing 2]



[Translation done.]